

Work Order ID 141736

Wednesday, February 10, 2016 2:19:42 PM

141736

Page 1

Item ID: D5317-1 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: PRELIM Stop ***NS2***
Item Name: Dowel Pin
Start Date: 2/17/2016 Start Qty: 10.00 ***10*** Cust Item ID:
Required Date: 2/17/2016 Req'd Qty: 10.00 ***10*** Customer:
Reference:

Approvals: Process Plan: MLJ Date: FEB 10 2016 Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr								
D5317	<u>A2</u> <u>BA</u> <u>9-89</u>								

100

100

Purchasing

Purchasing

Memo

Issue P/O: 31337
Possible supplier: MCMaster CARR
Supplier P/N: 97395A451

C OF C is required.

0.00

0.00

10FEB 11 2016**DAS**
13
9-89

110

110

Packaging

Packaging

Receive & Inspect for Damage & Mat'l Certs

Memo

0.00

0.00

10x Sp/6-02-17

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Description Work Order Deviation				Disposition					

Root Cause		FAULT CATEGORY					
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐		
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐		
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐		
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐		
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐		
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐		
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐		
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐		
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐		
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐		
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____					
Misidentified ☐	Past Due ☐						

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Page 2

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Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
120	QC6- Inspect dimensions to drawing	0.00							DAS 38 9-89
120									
QC	Memo	0.00							
Quality Control									
130	Identify as per dwg & Stock Location: <u>PRELIM</u>	0.00							DAS 38 9-89
130									
Packaging	Memo	0.00							
Packaging	***ONE YEAR EXPIRED DATE FROM RECEIVING:***								
140	QC21- Final Inspection - Work Order Release	0.00							DAS 38 9-89
140									
QC	Memo	0.00							
Quality Control									

POSITIVE RECALL
 FEB 10 2016
 EFFECTIVE DAS AUTH MCS
 RELEASED 9 DATE 16.05.24
 9-89
 at Rev BA
 as per ECN 46757 R016-1021-01

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
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Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐		
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐		
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐		
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐		
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐		
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐		
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐		
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐		
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐		
Past Expiry Date ☐	Manufacturing Process ☐	OTHER: _____					
Misidentified ☐	Past Due ☐						

Picklist Print

Wednesday, February 10, 2016 2:19:45 PM

Page 1

Work Order ID: 141736

141736

Parent Item: D5317-1

D5317-1

Parent Item Name: Dowel Pin

Start Date: 2/17/2016

Required Date: 2/17/2016

Start Qty: 10.00

Required Qty: 10.00

Comments: IIN REV:A 16.02.10 NEW ISSUE DD VERF:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
97395A451		Purchased			No		Each	0.0000		10			
97395A451										**			
Dowel Pin													

10x Sp 16-02-17

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

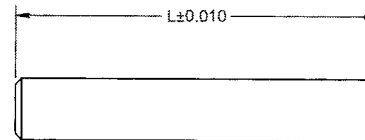
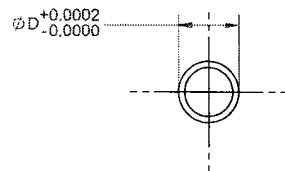
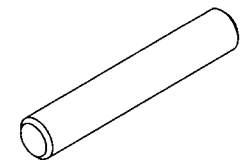
QA Closed: _____ Date: _____

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Misidentified ☐	Past Due ☐																																																														

ARY ISSUE

SPECIFICATION CONTROL DRAWING



SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 141736 MJS
16-02-10

ITEM	DART PART NUMBER	DESCRIPTION	POSSIBLE VENDOR	VENDOR PART NUMBER	MATERIAL	LENGTH (L) (IN)	DIAMETER (D) (IN)	WEIGHT (LB)
1	D5317-1	DOWEL PIN	MCMaster CARR	97395A451	316 SS	0.750	0.125	0.003

D5317-X DOWEL PIN

NOTES:

- 1) MATERIAL: SEE TABLE
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: PER QSI 044 6.7
- 7) WEIGHT: SEE TABLE

PRELIMINARY ISSUE

A	NEW ISSUE	AK	15.10.05
REV.	DESCRIPTION	BY	DATE
DESIGN	AK	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AK		
CHECKED	CC	DRAWING NO.	REV. A2
MFG. APPR.	JLM	D5317	SHEET 1 OF 1
APPROVED		TITLE	SCALE
DE APPR.		DOWEL PIN	NTS
DATE	15.10.05	COPYRIGHT © 2015 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSES OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	

Root Cause				FAULT CATEGORY			
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐		
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐		
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Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____					
Misidentified ☐	Past Due ☐						



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID PO31337

Purchase Order Date 2/11/2016

PO Print Date 2/11/2016

Page Number 1 of 2

Order From :

VU-MCM001

MCMASTER-CARR SUPPLY CO,
P.O. BOX 7690
CHICAGO, IL 60680-7690
US

Ship To : DART AEROSPACE LTD

1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

E-MAILED
FEB 11 2016

Contact Name		Buyer	Chantal Lavoie
Vendor Phone	330 995 5500	Customer POID	
Ship To Contact		Customer Tax #	10127-2607
Ship To Phone		Terms	Net 10
Ship Via:	Purolator ground ppd	Currency	USD
Ship Acct:		FOB	FCA - (Free Carrier)

Line Nbr	Reference Vendor Part Number	Description/ Mfg ID	Req Date/ Taxable	CD	Req Qty/ Unit of Measure	PO Unit Price	Extended Price
	Line Comments		Promise Date				
	Delivery Comments						
1	97395A451	Dowel Pin	2/16/2016 Yes 2/16/2016	FN	10.00 Each	\$0.81	\$8.12
	AS PER DWG D5317 REV. A B141736						
						Line Total:	\$8.12
2	6718K52	Fitting, Quick Disconnect	2/16/2016 Yes 2/16/2016		11.00 Each	\$5.81	\$63.91
						Line Total:	\$63.91
3	601.2045	RTV (LOCTITE 598)McMaster p/n: 6641A41	2/16/2016 Yes 2/16/2016		8.00 Each	\$13.80	\$110.40

Note:

2/11/2016

200 Aurora Industrial Pkwy
Aurora OH 44202-8087
330-995-5500
cle.sales@mcmaster.com

Dart Aerospace Ltd
1270 Aberdeen St
Hawkesbury ON K6A 1K7
Canada
Attention: Muffin

Purchase Order
PO31337

Order Placed By
Chantal Lavoie

McMaster-Carr Number
6973017-01

Page 1 of 1

02/11/2016

Line	Product	Ordered	Shipped
1	97395A451 Corrosion Resistant Dowel Pin, Type 316 Stainless Steel, 1/8" Diameter, 3/4" Length, Packs of 10	1 Pack	1
2	6718K52 Stainless Steel Industrial-Shape Hose Coupling, Plug, 1/4" NPTF Female, 1/4 Coupling Size	11 Each	11
3	6641A41 Loctite Gasket Maker, #598, 2.36 oz Tube	8 Each	8
4	5234K57 Super Soft Latex Rubber Tubing, 5/8" ID, 7/8" OD, 1/8" Wall, Opaque Black	50 Feet	50

SP16-02-11

McMaster-Carr Supply Company
200 Aurora Industrial Pkwy
Aurora, OH 44202-8087 USA
Phone: 330-995-5500 Fax: 330-995-9600
E-Mail: cle.sales@mcmaster.com
Employer Identification Number (EIN): 36-1458720

Invoice: 49775050
Purchase Order: PO31337
Release:
McMaster-Carr Number: 6973017-01

ORIGINAL COMMERCIAL
INVOICE
CERTIFICATE OF ORIGIN

Ultimate Destination:
Dart Aerospace Ltd
1270 Aberdeen St
Hawkesbury ON K6A 1K7
Canada

Shipped: 11-Feb-2016
FOB: ORIGIN
Shipper's Export Declaration (SED):
NO EEI 30.36

Intermediate Consignee:

Bill To:
Dart Aerospace Ltd
1270 Aberdeen St
Hawkesbury ON K6A 1K7
Canada

Tax Number:

Forwarding Agent:

Billing
Attention:
Shipping Muffin
Attention:
Contact:

Line	Description	Qty & Unit	Unit Price	Extension
1	97395A451 Corrosion Resistant Dowel Pin, Type 316 Stainless Steel, 1/8" Diameter, 3/4" Length, Packs of 10 Country of Origin: United States Schedule B #: 731829 ECCN #: EAR99 NLR	1 PK	\$8.12	\$8.12
2	6718K52 Stainless Steel Industrial-Shape Hose Coupling, Plug, 1/4" NPTF Female, 1/4 Coupling Size Country of Origin: United States Schedule B #: 848190 ECCN #: 2B999 NLR	11 EA	\$5.81	\$63.91
3	6641A41 Loctite Gasket Maker, #598, 2.36 oz Tube Country of Origin: United States Schedule B #: 321410 ECCN #: EAR99 NLR	8 EA	\$13.80	\$110.40
4	5234K57 Super Soft Latex Rubber Tubing, 5/8" ID, 7/8" OD, 1/8" Wall, Opaque Black Country of Origin: Mexico Schedule B #: 400911 ECCN #: EAR99 NLR	50 FT	\$4.09	\$204.50
NOTE Tracking number(s) for this shipment: MFA004657081				
Your order is subject only to our terms and conditions, available at www.mcmaster.com or from our Sales Department.				
These commodities, technology, or software were exported from the United States in accordance with Export Administration regulations. Diversion contrary to US law is prohibited.				

Shipping Weight (in kgs): 5

Number of Packages: 1

Invoice Amounts:

Merchandise Amount: \$386.93
Canadian GST/HST: \$52.29
Shipping Charges: \$15.26
Total (In USD): \$454.48

Package Dimensions:

44 X 44 X 22 CM = .043 CUBIC M

Payment Terms: 2% discount on merchandise only if paid within 10 days, net 30 days

Authorized Signature:

Date: 11-Feb-2016

Remit payment to:
(by mail)
McMaster-Carr Supply Company
PO Box 7690
Chicago, IL 60680-7690 USA

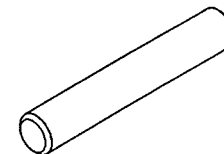
(by wire transfer)
Bank of America Illinois
231 S LaSalle
Chicago, IL 60697
ABA 071000039 Account 86666-02021
SWIFT BOFAUS3N

Name: Sarah Weinberg

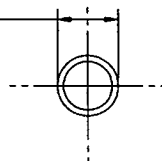
Title: Operations Mgr.

Page 1 of 1

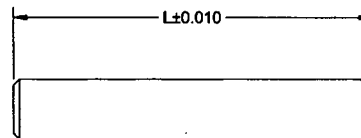
SPECIFICATION CONTROL DRAWING



$\phi D \begin{smallmatrix} +0.0002 \\ -0.0000 \end{smallmatrix}$



$L \pm 0.010$



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D5317-X DOWEL PIN

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- 6) IDENTIFICATION: PER QSI 044 6.7
- 7) WEIGHT: SEE TABLE

RELEASED
2016-04-18
ECN 16-557

APPROVED

A	NEW ISSUE	AK	15.10.05
REV.	DESCRIPTION	BY	DATE
DESIGN	AK	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AK		
CHECKED	CC	DRAWING NO.	REV. A
MFG. APPR.	JLM	D5317	SHEET 1 OF 1
APPROVED	HS	TITLE	SCALE
DE APPR.	DS	DOWEL PIN	NTS
DATE	15.10.05	COPYRIGHT © 2015 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL, AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	